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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,641	03/17/2004	Bing-Jei Liao	HMOP0008USA	2640
27765	7590	08/24/2005	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			NGUYEN, THANH NHAN P	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	

2871

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/708,641		LIAO, BING-JEI	
	Examiner		Art Unit	
	(Nancy) Thanh-Nhan P. Nguyen		2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/7/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 15, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hu et al U.S. Patent No. 5,517,344.

Referring to claim 1, Hu et al discloses a liquid crystal display panel comprising: a first substrate (13); a second substrate (14) having an active region; a sealant (19) positioned on the second substrate and surrounding the active region for adhering the second substrate to the first substrate; a spacer wall (12) positioned on the second substrate and between the sealant and the active region, the spacer wall having at least one liquid crystal injected opening and at least one spacer block (15) positioned near the liquid crystal injected opening; and a liquid crystal layer (18) positioned between the first substrate, the second substrate, and the sealant, [figs. 6-7].

Claims 15, and 20-21 are met the discussion regarding claim 1 rejection above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 6-7, 10-12 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu et al in view of Jung et al U.S. Patent Application Publication No. 2005/0030468.

Referring to claims 2-3, Hu et al discloses the second substrate further comprises a peripheral region surrounding the active region, [figs. 6-7]. Hu et al lacks disclosure of and a thin film layer located on the peripheral region where both the sealant and the spacer wall are located, wherein the thin film layer is an anti-reflective layer.

Jung et al discloses a thin film layer, which is anti-reflection film (not shown) formed on the peripheral area of the display panel for the benefit of preventing a reaction between the sealant and the liquid crystal material is formed on the sealant, [par. 0040]. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have an anti-reflective layer located on the peripheral region where both the sealant and the spacer wall area located for the benefit of preventing a reaction between the sealant (or the spacer wall) and the liquid crystal material is formed on the sealant (or the spacer wall).

Claims 6 and 10 are met the discussion regarding claims 1-2 rejection above.

Claim 7 is met the discussion regarding claims 1-3 rejection above.

Claim 11 is met the discussion regarding claims 1-2 rejection above.

Claim 12 is met the discussion regarding claims 1-3 rejection above.

Claim 16 is met the discussion regarding claims 1-2 rejection above.

Claim 17 is met the discussion regarding claims 1-3 rejection above.

Claims 4-5, 8-9, 13-14 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu et al in view of Jung et al, and further in view of Takako et al U.S. Patent Application Publication No. 2003/058264.

Referring to claims 4-5, Hu et al lacks disclosure of wherein the thin film layer is a first alignment layer, and the liquid crystal display panel further comprising a second alignment layer positioned on the first substrate and opposite to the first alignment layer, wherein the first alignment layer and the second alignment layer are both vertical alignment (VA) layers.

However, it was conventional at the time to have the thin film layer is a first alignment layer, and the liquid crystal display panel further comprising a second alignment layer positioned on the first substrate and opposite to the first alignment layer, wherein the first alignment layer and the second alignment layer are both vertical alignment (VA) layers, and therefore had the benefits associated with being conventional, such as the benefit of being available and the benefit of being suitable for the intended purpose, as evidenced by Takako, [fig. 11 -- elements 33,37]. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have the thin film layer is a first alignment layer, and the liquid crystal display panel further comprising a second alignment layer positioned on the first

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substrate and opposite to the first alignment layer, wherein the first alignment layer and the second alignment layer are both vertical alignment (VA) layers for the benefit of being available and the benefit of being suitable for the intended purpose.

Claim 8 is met the discussion regarding claims 1-2 and 4 rejection above.

Claim 9 is met the discussion regarding claims 1-2 and 5 rejection above.

Claim 13 is met the discussion regarding claims 1-2 and 4 rejection above.

Claim 14 is met the discussion regarding claims 1-2 and 5 rejection above.

Claim 18 is met the discussion regarding claims 1-2 and 4 rejection above.

Claim 19 is met the discussion regarding claims 1-2 and 5 rejection above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hu et al U.S. Patent No. 5,517,344.

Jung et al U.S. Patent Application Publication No. 2005/0030468.

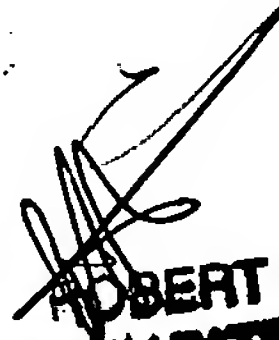
Takako et al U.S. Patent Application Publication No. 2003/058264.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Nancy) Thanh-Nhan P. Nguyen whose telephone number is 571-272-1673. The examiner can normally be reached on M-F/9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

(Nancy) Thanh-Nhan P Nguyen
Examiner
Art Unit 2871
-- August 18, 2005 -- *TN*


ROBERT KIM
SUPERVISORY PATENT EXAMINER